FORM PTO-1390 (Rev 5/93) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER: **ZAHFRI P409US**

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5): 10/088882

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/EP00/08964	**September 14, 2000**	**September 29, 1999**

TITLE OF INVENTION

CONTROL OF AN AUTOMATIC OR AUTOMATED GEARBOX USING VOICE COMMAND

APPLICANT(S) FOR DO/EO/US

Manfred SCHWAB and Ludger RONGE

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ■ This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.
3. ■ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ■ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ■ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
   b. ■ has been transmitted by the International Bureau. (PCT/IB/308 mailed **05 April 2001**).
   c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ■ A translation of the International Application into English (35 U.S.C. 371(c)(2)) is attached.
7. ■ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
   a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
   b. ☐ have been transmitted by the International Bureau.
   c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
   d. ■ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ■ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern other document(s) or information included:

11. ■ An Information Disclosure Statement under 37 CFR 1.97 and 1.98 with PTO FORM 1449.
12. ■ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ■ A FIRST preliminary amendment.
    ☐ A SECOND or SUBSEQUENT preliminary amendment.
14. ☐ A substitute specification w/Marked-Up Version of Amended Specification.
15. ☐ A change of power of attorney and/or address letter.
16. ■ Other items or information:

- ■ Preliminary Examination Report
- ■ Annexes to Pre. Ex. Rep.
- ■ International Search Report
- ■ German Novelty Search Report
- ■ 4 copies of citations
- ■ Form PCT/IB/308
- ■ International Publ. No. **WO 01/23781 A1** (Face page only)
- ■ Copy of Request
- ■ Submission of Formal Drawing
- ■ 1 sheet of formal drawing
- ■ Abstract
- ☐ **Applicant Claims Small Entity Status**
- ☐ Copy of Notification of File Missing Parts
- ■ German Language Specification

CERTIFICATION UNDER 37 CFR 1.10

I hereby certify that this Transmittal Letter and the papers indicated as being transmitted therewith is being deposited with the United States Postal Service on this date **March 21, 2002** in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number **EL 918840067 US** addressed to the: Box PCT, Assistant Commissioner of Patents, Washington, D.C. 20231.

Anthony G. M. Davis
(typed or printed name of person mailing paper)

Anthony G. M. Davis
(signature of person mailing paper)

PATENT & TRADEMARK OFFICE

020210

17. ■ The following fees are submitted:	CALCULATIONS	PTO USE ONLY
Basic National Fee (37 CFR 1.492(a)(5): JC13 Rec'd PCT/PTO 21 MAR 2002		
Search Report has been prepared by the EPO or JPO $890.00		
International preliminary examination fee paid to USPTO (37 CFR 1.492(a)(1) .. $710.00		
No international preliminary examination fee paid to USPTO (37 CFR 1.492(a)(2) but international search fee paid to USPTO (37 CFR 1.445(a)(2)). $740.00		
Neither international preliminary examination fee (37 CFR 1.492(a)(3) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO $1040.00		
International preliminary examination fee paid to USPTO (37 CFR 1.492(a)(4) and all claims satisfied provisions of PCT Article 33(1)-(4) $100.00		
ENTER APPROPRIATE BASIC FEE AMOUNT =	890	
Surcharge of $130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).	0	

Claims	Number Filed	Number Extra	Rate		
Total Claims	10 - 20 =	0	x $18.00	0	
Independent Claims	2 - 3 =	0	x $84.00	0	
Multiple dependent claim(s) (if applicable)			+ $280.00	0	
			TOTAL OF ABOVE CALCULATIONS =	0	
Reduction by 1/2 for filing by small entity, if applicable. **Applicant Claims Small Entity Status.** (Note 37 CFR 1.9, 1.27, 1.28).				0	
			SUBTOTAL =	890	
Processing fee of $130.00 for furnishing the English translation later the ☐ 20 ☐30 months from the earliest claimed priority date (37 CFR 1.492(f)).			+	0	
			TOTAL NATIONAL FEE =	0	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). $40.00 per property			+	40	
			TOTAL FEES ENCLOSED =	930	
				Amount to be: refunded	$
				charged	$

a. ■ A check in the amount of $ **930.00** to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. 04-0213 in the amount of $____ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ■ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 04-0213. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Anthony G.M. Davis -- Registration No. 27,868
Davis & Bujold, P.L.L.C.
Fourth Floor
500 North Commercial Street
Manchester, NH 03101-1151
Telephone (603) 624-9220
Telefax (603) 624-9229

PATENT & TRADEMARK OFFICE

020210

03/21/02 PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Manfred SCHWAB and Ludger RONGE
Serial no.	:	
For	:	CONTROL OF AN AUTOMATIC OR AUTOMATED GEARBOX USING VOICE COMMAND
Docket	:	ZAHFRI P409US

BOX PCT
The Commissioner of Patents and Trademarks
Washington, D.C. 20231

FIRST PRELIMINARY AMENDMENT

Dear Sir:

By way of preliminary amendment, please amend the above identified application as set forth below.

In the Specification:

Please cancel paragraphs 2, 3, 4, 9, 10, 14, 15, 16 and 17 of the specification, in their entirety, in favor of a clean form of paragraphs 2, 3, 4, 10, 14, 15, 16 and 17 of the specification, without any markings thereon, as follows. Accompanying this response is a copy of the original paragraphs of the specification which show the addition(s) (by underlining and bold) and the deletion(s) (by strikeout) to the canceled specification paragraphs. Please enter the replacement specification paragraphs into the record of this case.

In the Claims:

Please cancel claims 1-10, without prejudice or disclaimer of the subject matter therein, in favor of new claims 11-20 as follows.

[002] FIELD OF THE INVENTION

[003] The invention relates to the control of an automatic or automated gear shift in a variable transmission of a vehicle.

[004] BACKGROUND OF THE INVENTION

[010] SUMMARY OF THE INVENTION

[014] BRIEF DESCRIPTION OF THE DRAWING

[015] The invention will now be described, by way of example, with reference to the accompanying drawings in which:

[016] Fig. 1 shows the control of an automatic or automated gear shift in a variable transmission of a vehicle.

[017] DETAILED DESCRIPTION OF THE INVENTION

11. (NEW) A system for shifting by the driver, a transmission (2) of a vehicle having voice command (20) in which the voice commands given by the driver are compared with reference voice commands stored in a memory (22) and control signals are formed therefrom in a transmission control (6), wherein in said transmission control (6) the control signals formed from the driver's voice commands are superimposed onto the shift signals calculated by said transmission control (6) in order to form therefrom a shift command for said transmission (2) which is appropriate for the driving situation and to correct shifting signals calculated by said transmission control (6).

12. (NEW) The system according to claim 11, wherein via the voice command device (20) are given the number of gear steps during a change of a reduction ratio both in the upshifts and also in the downshifts.

13. (NEW) The system according to claim 11, wherein via the voice command device (20) special driving programs, such as economy, sports programs and winter programs are given.

14. (NEW) The system according to claim 11, wherein via the voice command device (20) is given a command for suppressing the creeping of the vehicle.

15. (NEW) The system according to claim 11, wherein via the voice command device (20) is given a command for maintaining the already engaged reduction ratio.

16. (NEW) The system according to claim 11, wherein via the voice command device (20) is given a desired starting ratio.

17. (NEW) The system according to claim 11, wherein the voice command device (20) is provided with an easily accessible device for releasing the use of the voice command device (20).

18. (NEW) The system according to claim 17, wherein the device (26) releases the voice command for a predeterminable time interval.

19. (NEW) The system according to claim 17, wherein during travel the device is accessible exclusively to the driver.

20. (NEW) A method for shifting a transmission (2) of a vehicle having a voice command device (2) operable by the driver by voice commands which are compared with reference voice commands stored in a memory (22) with control signals are formed therefrom in a transmission control (6), wherein in a transmission control (6) the control signals formed from the driver's voice commands are superimposed onto shifting signals

calculated by said transmission control (6) in order to form therefrom a shift command for said variable transmission (2) of the vehicle appropriate to the situation and to correct the shifting signals calculated by said transmission control (6).

REMARKS

Accompanying this response, please find marked-up paragraphs of the specification which overcome some informalities noted in the specification. The undersigned avers that the enclosed replacement paragraph(s) of the specification do not contain any new matter.

Please consider new claims 11-20 upon consideration of this application.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,

Anthony G.M. Davis, Reg. No. 27,868
Customer No. 020210
Davis & Bujold, P.L.L.C.
Fourth Floor
500 North Commercial Street
Manchester NH 03101-1151
Telephone 603-624-9220
Facsimile 603-624-9229
E-mail: patent@davisandbujold.com

VERSION WITH MARKINGS TO SHOW CHANGES MADE

[001] CONTROL OF AN AUTOMATIC OR AUTOMATED GEARBOX USING VOICE COMMAND

[002] **FIELD OF THE INVENTION**

[003] ~~According to the preamble of Claim 1 t~~The invention relates to the control of an automatic or automated gear shift in a variable transmission of a vehicle.

[004] **BACKGROUND OF THE INVENTION**

[005] Automatic or automated transmission of vehicles usually engage in accordance with preset shift programs which allow different parameters of the existing state of the vehicle and driver's requests to enter into the calculation of a suitable reduction ratio of the transmission. The sensors that produce the different parameters cannot detect imminent driving situations and influences upon the vehicle originating from the traffic situation and thus also cannot be the basis of a calculation. In different situations the active engagement of the driver is required since he can better appraise the vehicle situation, the traffic situation, the road state, or the peculiarities of the topography.

[006] Situations can thus occur in which the transmission does shift but that are unsuitable and disagreeable for the driver. In those cases the transmission can shift at a moment unforeseeable for the driver or also an unforeseeably higher gear change not suited to the existing traffic situation or topography can be carried out.

[007] DE 196 50 770 A1 has disclosed by way of example for automatic transmissions to control and thus to adjust the control lever for different shifting modes of the transmission via a voice control. Here the normally manual introduction of a shifting mode in an automatic transmission is replaced by the voice command, that is, the introduced shifting mode of an automatic transmission, not the change of a reduction ratio within the transmission, is corrected by voice control. Which reduction ratio is shifted to the respective shifting mode remains as before left to the control of the automatic transmission. Such an adjustment of the desired shifting mode also takes place only in few situations of the vehicle operation since, the same as is usual in an automatic transmission, the different shifting modes as a rule are introduced when the vehicle is stopped (forward, reverse, parking, etc.) and then during the driving operation in the respective

shifting mode it is no more changed. The selection of the correct reduction ratio in the existing shifting mode remains then left to the transmission control. To the driver is only left which shifting mode to choose via the voice command. A change of the shifted reduction ratio is here hardly possible and a change based on the driving situation is absolutely impossible.

[008] The problem on which the invention is based is, in an automatic or automated transmission, to assist in the transmission a change of the reduction ratio based on the driving situation.

[009] ~~The problem is solved by a device having the characteristics of claim 1 and a method according to claim 10. Developments are object of sub-claims.\~~

[010] **SUMMARY OF THE INVENTION**

[011] In a system for shifting an automatic or automated variable transmission of a vehicle wit a device for voice command by the driver in which the voice commands given by the driver are compared with reference voice commands stored in a memory and therefrom control signals are formed, in a transmission control of the vehicle the control signals formed from the driver's voice commands are superimposed onto the shifting signals calculated by the transmission control in order to form therefrom a shift command for the vehicle transmission that is suited to a situation. Thereby the driver can control the vehicle correctly on the basis of vehicle, traffic situation or also topography. In an advantageous development the number of ratio steps when changing the reduction ratio, both when upshifting and when downshifting, are to be given via the device for voice command an din another development special driving programs like economy or sports programs or winter programs are to be given. In one development the creeping of the vehicle is to be suppressed by the device for voice command. In an advantageous development the command to maintain the actually engaged reduction ratio is given by the device for voice command or in one development a desired starting ratio corresponding to the actual load or gradient on which the vehicle stands is to be given. Another development shows for the device for voice command an apparatus of easy access for the driver with which the use of the

device for voice command is released. In one development the use of a predeterminable time interval is released and in one development the apparatus is designed exclusively accessible for the driver himself during the travel.

[012] An imminent traffic situation like a traffic light signal installation blocking a thoroughfare, the end of a bottleneck, a level crossing or a pedestrian crossing are detected by the driver with his sense organs. The same applied to the detection of an imminent gradient after a long drive on lat road or reaching of the bottom of the valley after long uphill drive possibly using additional braking devices of the vehicle. The given road state, specially as consequence of weather influences, hardly plays an important part for the reduction ratio to be engaged. The imminent situation can likewise require a shift over several gear steps or conversely not allow it or make it seem unsuitable. The driver can decide whether a gear shift still is or is not adequate. Accordingly, he will allow it, correct ir or prevent it by entering voice commands.

[013] The shift reduction steps can be relevant to safety depending on the vehicle situation. Gear sifts based on wrong interpretation of the voice detection system, for ex., due to conversations of the passengers or other environmental noises like street noises or radio noises mus therefore be reliably eliminated. It must be possible to prevent that passenger emits an inappropriate voice command which becomes a dangerous engagement in the vehicle control. Hence, a control element must be provided that only the driver can reach and that releases only at times the input of voice commands to the transmission control. This can be an inching switch which when actuated releases the command input for the transmission functions for a predetermined or programmed time interval.

[014] **BRIEF DESCRIPTION OF THE DRAWING**

[015] The invention ~~is explained in detail~~**will now be described, by way of example,** with reference to ~~a drawing.~~

~~[016]~~

~~[017~~**the accompanying drawings in which:**

[016] **Fig. 1 shows the control of an automatic or automated gear shift in a variable transmission of a vehicle.**

[017] **DETAILED DESCRIPTION OF THE INVENTION**

[018] The single figure shows an automated transmission 2 which is connected via a control line 4 such as a CAN bus line or other communication bus line with a transmission control 6, a clutch regulator 8 and a gear shift lever 10. Via the line 16 compressed air is supplied to a transmission regulator 14 and via the line 12 compressed air is supplied to the clutch regulator 8. The control line 4 is connected on an interface 18 with other elements of the vehicle not shown here like, for ex., motor electronics (EDC), motor brake, ABS, ASR or retarders. A device for voice command 20 is likewise attached to the control line 4. In the device 20 a memory 22 is located for voicecommands reference. A microphone 24 for input of voice commands by the driver is connected with the device 20. On the gear shift lever 10 a button 26 is provided with which the driver can release the voice commands. Such button can also be provided as steering drop arm on a steering wheel not shown here. The button can also be situated directly on the surface of the steering wheel or in the engagement area on the steering wheel rim.

[001] # CONTROL OF AN AUTOMATIC OR AUTOMATED GEARBOX USING VOICE COMMAND

[002]

[003] According to the preamble of Claim 1 the invention relates to the control of an automatic or automated gear shift in a variable transmission of a vehicle.

[004]

[005] Automatic or automated transmission of vehicles usually engage in accordance with preset shift programs which allow different parameters of the existing state of the vehicle and driver's requests to enter into the calculation of a suitable reduction ratio of the transmission. The sensors that produce the different parameters cannot detect imminent driving situations and influences upon the vehicle originating from the traffic situation and thus also cannot be the basis of a calculation. In different situations the active engagement of the driver is required since he can better appraise the vehicle situation, the traffic situation, the road state, or the peculiarities of the topography.

[006] Situations can thus occur in which the transmission does shift but that are unsuitable and disagreeable for the driver. In those cases the transmission can shift at a moment unforeseeable for the driver or also an unforeseeably higher gear change not suited to the existing traffic situation or topography can be carried out.

[007] DE 196 50 770 A1 has disclosed by way of example for automatic transmissions to control and thus to adjust the control lever for different shifting modes of the transmission via a voice control. Here the normally manual introduction of a shifting mode in an automatic transmission is replaced by the voice command, that is, the introduced shifting mode of an automatic transmission, not the change of a reduction ratio within the transmission, is corrected by voice control. Which reduction ratio is shifted to the respective shifting mode remains as before left to the control of the automatic transmission. Such an adjustment of the desired shifting mode also takes place only in few situations of the vehicle operation since, the same as is usual in an automatic transmission, the different shifting modes as a rule are introduced when the vehicle is stopped (forward, reverse, parking, etc.) and then during the driving operation in the respective

shifting mode it is no more changed. The selection of the correct reduction ratio in the existing shifting mode remains then left to the transmission control. To the driver is only left which shifting mode to choose via the voice command. A change of the shifted reduction ratio is here hardly possible and a change based on the driving situation is absolutely impossible.

[008] The problem on which the invention is based is, in an automatic or automated transmission, to assist in the transmission a change of the reduction ratio based on the driving situation.

[009] The problem is solved by a device having the characteristics of claim 1 and a method according to claim 10. Developments are object of sub-claims.\

[010]

[011] In a system for shifting an automatic or automated variable transmission of a vehicle wit a device for voice command by the driver in which the voice commands given by the driver are compared with reference voice commands stored in a memory and therefrom control signals are formed, in a transmission control of the vehicle the control signals formed from the driver's voice commands are superimposed onto the shifting signals calculated by the transmission control in order to form therefrom a shift command for the vehicle transmission that is suited to a situation. Thereby the driver can control the vehicle correctly on the basis of vehicle, traffic situation or also topography. In an advantageous development the number of ratio steps when changing the reduction ratio, both when upshifting and when downshifting, are to be given via the device for voice command an din another development special driving programs like economy or sports programs or winter programs are to be given. In one development the creeping of the vehicle is to be suppressed by the device for voice command. In an advantageous development the command to maintain the actually engaged reduction ratio is given by the device for voice command or in one development a desired starting ratio corresponding to the actual load or gradient on which the vehicle stands is to be given. Another development shows for the device for voice command an apparatus of easy access for the driver with which the use of the

device for voice command is released. In one development the use of a predeterminable time interval is released and in one development the apparatus is designed exclusively accessible for the driver himself during the travel.

[012] An imminent traffic situation like a traffic light signal installation blocking a thoroughfare, the end of a bottleneck, a level crossing or a pedestrian crossing are detected by the driver with his sense organs. The same applied to the detection of an imminent gradient after a long drive on lat road or reaching of the bottom of the valley after long uphill drive possibly using additional braking devices of the vehicle. The given road state, specially as consequence of weather influences, hardly plays an important part for the reduction ratio to be engaged. The imminent situation can likewise require a shift over several gear steps or conversely not allow it or make it seem unsuitable. The driver can decide whether a gear shift still is or is not adequate. Accordingly, he will allow it, correct ir or prevent it by entering voice commands.

[013] The shift reduction steps can be relevant to safety depending on the vehicle situation. Gear sifts based on wrong interpretation of the voice detection system, for ex., due to conversations of the passengers or other environmental noises like street noises or radio noises mus therefore be reliably eliminated. It must be possible to prevent that passenger emits an inappropriate voice command which becomes a dangerous engagement in the vehicle control. Hence, a control element must be provided that only the driver can reach and that releases only at times the input of voice commands to the transmission control. This can be an inching switch which when actuated releases the command input for the transmission functions for a predetermined or programmed time interval.

[014]

[015] The invention is explained in detail with reference to a drawing.

[016]

[017] The single figure shows an automated transmission 2 which is connected via a control line 4 such as a CAN bus line or other communication bus line with a transmission control 6, a clutch regulator 8 and a gear shift lever 10. Via the line 16 compressed air is supplied to a transmission regulator 14 and via the line 12 compressed air is supplied to the clutch regulator 8. The control line 4 is connected on an interface 18 with other elements of the vehicle not shown here like, for ex., motor electronics (EDC), motor brake, ABS, ASR or retarders. A device for voice command 20 is likewise attached to the control line 4. In the device 20 a memory 22 is located for voicecommands reference. A microphone 24 for input of voice commands by the driver is connected with the device 20. On the gear shift lever 10 a button 26 is provided with which the driver can release the voice commands. Such button can also be provided as steering drop arm on a steering wheel not shown here. The button can also be situated directly on the surface of the steering wheel or in the engagement area on the steering wheel rim.

Reference numerals

2 transmission
4 control line
6 transmission control
8 clutch regulator
10 gear shift lever
12 line
14 transmission regulator
16 line
18 interface
20 device for voice command
22 memory
23 microphone
24 button

Claims

1. System for shifting an automatic or automated variable transmission (2) of a vehicle with a device for voice command (20) by the driver in which the voice commands given by the driver are compared with reference voice commands stored in a memory (22) and control signals are formed therefrom, characterized in that in a transmission control (6) the control signals formed form the driver's voice commands are superimposed onto the shift signals calculated by said transmission control (6) in order to form therefrom a shift command for the variable transmission of the vehicle which is appropriate for the driving situation.

2. System for shifting an automatic or automated variable transmission (2) of a vehicle according to claim 1, characterized in that via the device for voice command (20) are to be given the number of gear steps during change of the reduction ratio both in the upshifts and also in the downshifts.

3. System for shifting an automatic or automated variable transmission (2) of a vehicle according to claim 1 or 2, characterized in that via the device for voice command (20) special driving programs like economy or sports programs or winter programs are given.

4. System for shifting an automatic or automated variable transmission (2) of a vehicle according to any one of claims 1 to 3, characterized in that via the device for voice command (20) is given the command of suppressing the creeping of the vehicle.

5. System for shifting an automatic or automated variable transmission (2) of a vehicle according to any one of claims 1 to 4, characterized in that via the device for voice command (20) is given the command of maintaining the actually engaged reduction ratio.

6. System for shifting an automatic or automated variable transmission (2) of a vehicle according to any one of claims 1 to 5, characterized in that via the device for voice command (20) is given a desired starting ratio.

7. System for shifting an automatic or automated variable transmission (2) of a vehicle according to any one of claims 1 to 6, characterized in that for the

device for voice command (20) a device is provided which is easily accessible for the driver and with which is released the use of the device for voice command (20).

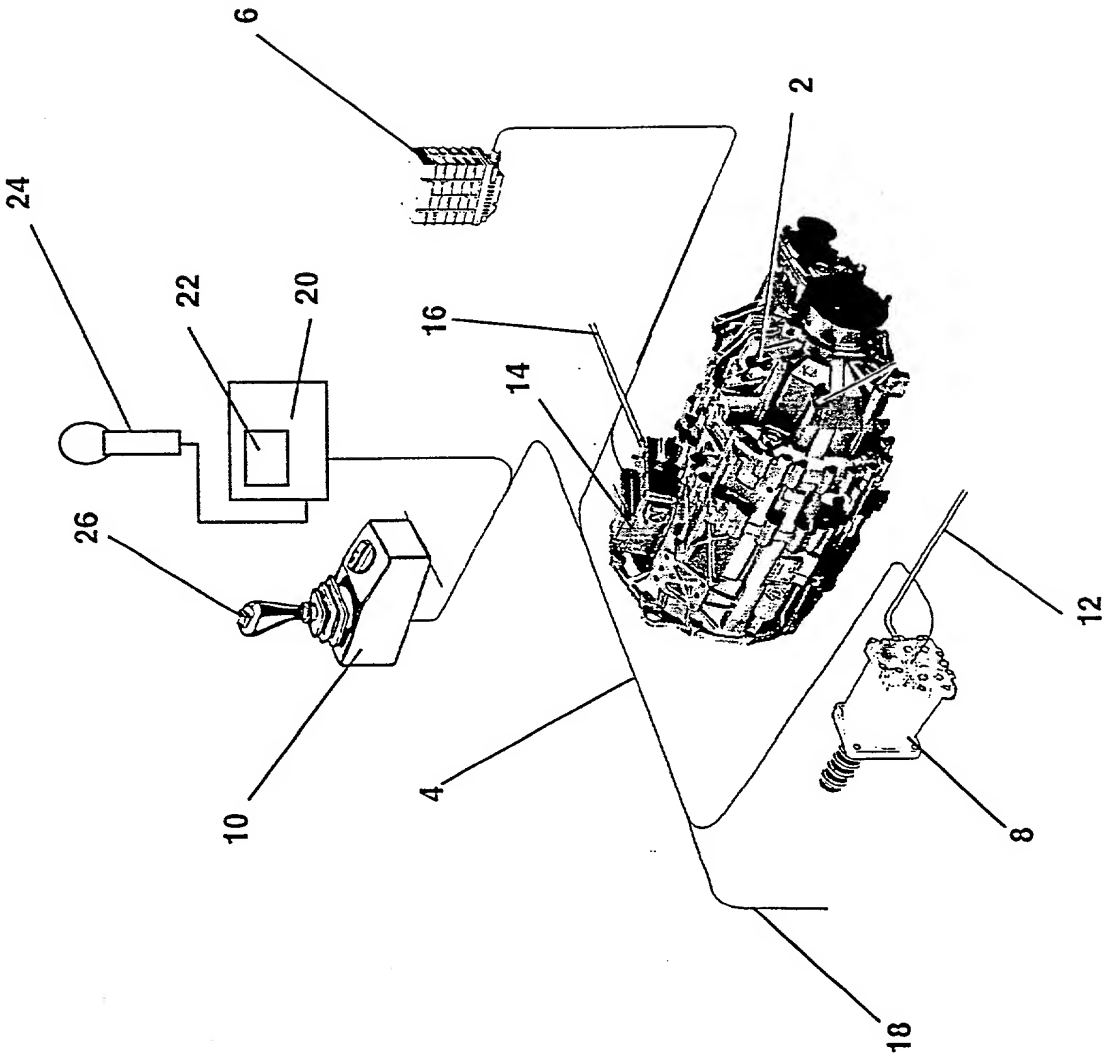
8.. System for shifting an automatic or automated variable transmission (2) of a vehicle according to claim 7 characterized in that the device (26) releases the voice command for a predeterminable time interval.

9. System for shifting an automatic or automated variable transmission (2) of a vehicle according to claim 7 to 8, characterized in that during travel the device is accessible exclusively to the driver.

10. Method for shifting an automatic or automated variable transmission (2) of a vehicle in which in a device for voice command (20) by the driver in which the voice commands given by the driver are compared with reference voice commands stored in a memory (22) and control signals are formed therefrom, characterized in that in a transmission control (6) the control signals formed from the driver's voice commands are superimposed onto shifting signals calculated by the transmission control (6) to order to form therefrom a shift command for the vehicle variable transmission (2) appropriate to the situation.

ABSTRACT OF THE DISCLOSURE

In a system for shifting an automatic or automated variable transmission (2) of a vehicle with a voice command device (20) by the driver in which the voice commands given by the driver are compared with reference voice commands stored in a memory (22) and therefrom control signals are formed, in a transmission control (6) the control signals formed form the driver's voice commands are superimposed onto the shift signals calculated by the transmission control (6) in order therefrom to form a shift command of the variable transmission (2) of the vehicle appropriate for the driving situation.



7615 US F

COMBINED DECLARATION AND POWER OF ATTORNEY

(Original, Design, National Stage of PCT, Supplemental)

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is of the following type: (check one applicable item below)

- original
- design
- supplemental
- X National Stage of PCT
- divisional (see added page)
- continuation (see added page)
- continuation-in-part (see added page)

INVENTORSHIP IDENTIFICATION

My residence, post office address and citizenship are as stated below next to my name. I believe that the original, first and sole inventor *(if only one name is listed below)* an original, first and joint inventors *(if plural names are listed below)* of the subject matter that is claimed, and for which a patent is sought on the invention entitled:

TITLE OF INVENTION

CONTROL OF AN AUTOMATIC OF AUTOMATED GEARBOX USING COMMAND

SPECIFICATION IDENTIFICATION

The specification of which: (complete (a), (b) or (c))

(a) is attached hereto.

(b) was filed on _____ as " Serial No. 0 / _____ or " Express Mail No. _____ (as Serial No. not yet known)_____ and was amended on _____(if applicable).

(c) X was described and claimed in PCT International Application No. **PCT/EP00/08964** filed on **14 September 200 (14.09.2000)** and as amended under PCT Article 19 on _____ (if any).

POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name(s) and registration number(s))

3

Anthony G. M. Davis Registration No. 27,868
Michael J. Bujold Registration No. 32,018
Scott A. Daniels Registration No. 42,462

Attached as part of this Declaration and Power of Attorney is the authorization of the above-named attorney(s) to accept and follow instructions from my representative(s).

Send Correspondence to
Davis & Bujold, P. L. L. C.
Fourth Floor
500 N. Commercial Street
Manchester, NH 03101

Direct Telephone Calls to:
(603) 624-9220

Direct Telefaxes to:
(603)624-9229

ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent Office all information which is known to be material to patentability of this application as defined in § 1.56 of Title 37 of the Code of Federal Regulations.

PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

EARLIEST FOREIGN APPLICATION(S), IF ANY FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

COUNTRY	APPLICATION NO.	DATE OF FILING (day,month,year)	PRIORITY CLAIMED UNDER 37 USC 119
Fed. Rep. of Germany	**199 46 559.2**	**(29.09.99) 29. September 1999**	☒ YES NO
			YES NO
			YES NO
			YES NO
			YES NO

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signature(s)

Full name of ~~sole~~ first inventor **Manfred SCHWAB**

Inventor's signature _____ Date 19.12.01

Country of Citizenship **Fed. Rep. of Germany**

Residence **Charlottenstr. 21, D-88212 Ravensburg, Germany** DEX

Post Office Address **c/o ZF Friedrichshafen AG, D-88038 Friedrichshafen, Germany**

2-10

Full name of **second** joint inventor (if any) **Ludger RONGE** Ludger Ronge

Inventor's signature _____ Date December 12, 2001

Country of Citizenship **Fed. Rep. of Germany**

Residence **Riedstr. 7/1, D-88097 Eriskirch, Germany** (DEX)

Post Office Address **c/o ZF Friedrichshafen AG, D-88038 Friedrichshafen, Germany**

Full name of **third** joint inventor (if any)_____

Inventor's signature _____ Date _____

Country of Citizenship _____

Residence _____

Post Office Address _____

Full name of **fourth** joint inventor (if any)_____

Inventor's signature _____ Date _____

Country of Citizenship _

Residence ____

Post Office Address _

Full name of **fifth** joint inventor (if any)_____

Inventor's signature _____ Date _____

Country of Citizenship _

Residence ____

Post Office Address _

Full name of **sixth** joint inventor (if any)_____

Inventor's signature _____ Date _____

Country of Citizenship _

Residence ____

Post Office Address _

Full name of **seventh** joint inventor (if any)_____

Inventor's signature _____ Date _____

Country of Citizenship _

Residence _____

Post Office Address _